

PART 1 20/01
Section 29

AUSTRALIA

Patents Act 1990

PATENT REQUEST: STANDARD PATENT/PATENT OF ADDITION

We, being the persons identified below as the Applicant, request the grant of a patent to the person identified below as the Nominated Person, for an invention described in the accompanying standard complete specification.

Full application details follow.

- [71] Applicant: HOECHST AKTIENGESELLSCHAFT
Address: D-65926 FRANKFURT AM MAIN, FEDERAL REPUBLIC OF GERMANY
- [70] Nominated Person: HOECHST AKTIENGESELLSCHAFT
Address: D-65926 FRANKFURT AM MAIN, FEDERAL REPUBLIC OF GERMANY
- [54] Invention Title: DEVICE FOR ADMINISTERING IMPLANTS
- [72] Name(s) of actual inventor(s): HANS-JOACHIM LOOS, GUNTER ZIEGERT, HORST PAJUNK and HEINRICH PAJUNK
- [74] Address for service in Australia: c/o WATERMARK PATENT & TRADEMARK ATTORNEYS, of The Atrium, 290 Burwood Road, Hawthorn, Victoria 3122, Australia
Attorney Code: WM

BASIC CONVENTION APPLICATION(S) DETAILS

[31] Application Number	[33] Country	Country Code	[32] Date of Application
P43 20 754.5	GERMANY	DE	23 JUNE 1993

Basic Applicant(s): HOECHST AKTIENGESELLSCHAFT

Drawing number recommended to accompany the abstract

By our Patent Attorneys,
WATERMARK PATENT & TRADEMARK ATTORNEYS


Darryl B. Mischewski
Registered Patent Attorney

DATED this 2nd day of June 1994.

M057108 210694

BEST AVAILABLE COPY



AU9464855

(12) PATENT ABSTRACT (11) Document No. AU-A-64855/94
(19) AUSTRALIAN PATENT OFFICE

- (54) Title
DEVICE FOR ADMINISTERING IMPLANTS
- International Patent Classification(s)
(51)^s A61M 037/00
- (21) Application No. : 64855/94 (22) Application Date : 21.06.94
- (30) Priority Data
- (31) Number (32) Date (33) Country
4320754 23.06.93 DE GERMANY
- (43) Publication Date : 05.01.95
- (71) Applicant(s)
HOECHST AKTIENGESELLSCHAFT
- (72) Inventor(s)
HANS-JOACHIM LOOS; GUNTER ZIEGERT; HORST PAJUNK; HEINRICH PAJUNK
- (74) Attorney or Agent
WATERMARK PATENT & TRADEMARK ATTORNEYS, Locked Bag 5, HAWTHORN VIC 3122
- (57) Claim

1. A device for administering implants, comprising an active substance container with injection cannula and plunger, the plunger being arranged in a plunger channel which merges with continuity into the lumen of the cannula, wherein a holder device (5) for the implant (2) is arranged at the lumen-side end of the plunger channel (3).

Patents Act 1990
Regulation 3.2(2)

AUSTRALIA

Patents Act 1990

**ORIGINAL
COMPLETE SPECIFICATION
STANDARD PATENT**

Application Number:

Lodged:

Invention Title: DEVICE FOR ADMINISTERING IMPLANTS

The following statement is a full description of this invention, including the best method of performing it known to us :-

HOECHST AKTIENGESELLSCHAFT HOE 93/F 170 DPh.HS/sch

Description

Device for administering implants

5 The invention relates to a device for administering implants, comprising an active substance container with injection cannula and plunger, the plunger being arranged in a plunger channel which merges with continuity into the lumen of the cannula.

10 Devices of the type mentioned are known from DE 3 802 158 A1. A disadvantage of these devices is that the rod-shaped implant, which can contain a medicament, can slip out of the plunger channel, which at the same time forms the implant chamber, and slip through the lumen of the cannula, as a result of which the implant cannot be used
15 for administration.

The invention is intended to rectify this. The object is achieved by means of the device which is mentioned at the start, and in which a holder device for the implant is arranged in the plunger channel.

20 The holder device can comprise two elastic pins which are arranged opposite one another and which in each case have a rounded end protruding into the plunger channel. The holder device can moreover comprise two spring-loaded pins which are arranged opposite one another and which in
25 each case have a rounded end protruding into the plunger channel. In a further embodiment, the holder device can comprise at least one spring-loaded ball, preferably two spring-loaded balls, protruding into the plunger channel.

30 The holder device not only prevents the inadvertent escape of the implant from the administration device, but also frees the plunger channel without damaging the implant.

- 2 -

The invention is explained in greater detail hereinbelow with reference to drawings which show only one embodiment.

Figure 1 shows, in a sectional view, the device for administering implants,

Figure 2 shows, in a sectional view, the detail "Z" in an alternative embodiment of the holder device, and

Figure 3 shows, in a sectional view, the detail "Z" in a further alternative embodiment of the holder device.

10 The device for administering implants, so-called rods, comprises an active substance container 1 with injection cannula 6 and plunger 4. The plunger 4 is arranged in a plunger channel 3, which also receives the preferably rod-shaped implant 2 and thus serves as an implant
15 chamber. The plunger channel 3 must merge with continuity into the lumen of the cannula 6 so that cross-sectional variations are avoided on the route which the implant takes on being administered. In order to ensure that the implant 2 cannot leave the active substance container 1
20 inadvertently, a holder device 5 for the implant 2 is provided at the lumen-side end of the plunger channel 3. The holder device 5 protrudes slightly into the plunger channel 3 and thus forms an obstacle for the implant 2. In order to avoid deformations of the implant and/or
25 abrasion of the implant during administration, the holder device 5 should be designed or arranged such that it moves out of the way of the implant, without damaging the latter, and so clears the way. The holder device 5 can comprise at least one pin, normally two pins 7, 8, in
30 each case having a rounded end 11. The pins 7, 8 can be made of elastic material from various rubber types or the like (Figure 1). Similarly, pins 7, 8 made of non-elastic material, which are held in position by the pressure of springs 12, are suitable (Figure 2). In the case of the
35 rigid bolts 7, 8 too, the end 11 protruding into the plunger channel 3 can be rounded. Instead of the pins 7, 8, balls which protrude into the plunger channel 3 via

- 3 -

their spherical caps 13 are equally suitable (Figure 3).
The balls 9, 10 can, like the pins 7, 8, be made of
elastic material or be held in their position with a
spring 12. Spring resilience, elasticity and surface
5 rounding should be such that the implant can pass the
holder device 5 without deformation and/or abrasion
losses.

- 4 -

HOE 93/F 170

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

~~Patent Claims~~XXXXXXXXXX

1. A device for administering implants, comprising an active substance container with injection cannula and plunger, the plunger being arranged in a plunger channel which merges with continuity into the lumen of the cannula, wherein a holder device (5) for the implant (2) is arranged at the lumen-side end of the plunger channel (3).
2. The device as claimed in claim 1, wherein the holder device (5) comprises two elastic pins (7, 8) which are arranged opposite one another and which in each case have a rounded end (11) protruding into the plunger channel (3).
3. The device as claimed in claim 1, wherein the holder device (5) comprises two spring-loaded pins (7, 8) which are arranged opposite one another and which in each case have a rounded end (11) protruding into the plunger channel (3).
4. The device as claimed in claim 1, wherein the holder device (5) comprises at least one spring-loaded ball, preferably two spring-loaded balls (9, 10) arranged opposite one another and protruding into the plunger channel (3) via their spherical caps (13).

DATED this 21st day of June 1994.

HOECHST AKTIENGESELLSCHAFTWATERMARK PATENT & TRADEMARK ATTORNEYS
"THE ATRIUM"
290 BURWOOD ROAD
HAWTHORN. VIC. 3122.

- 1 -

HOE 93/F 170

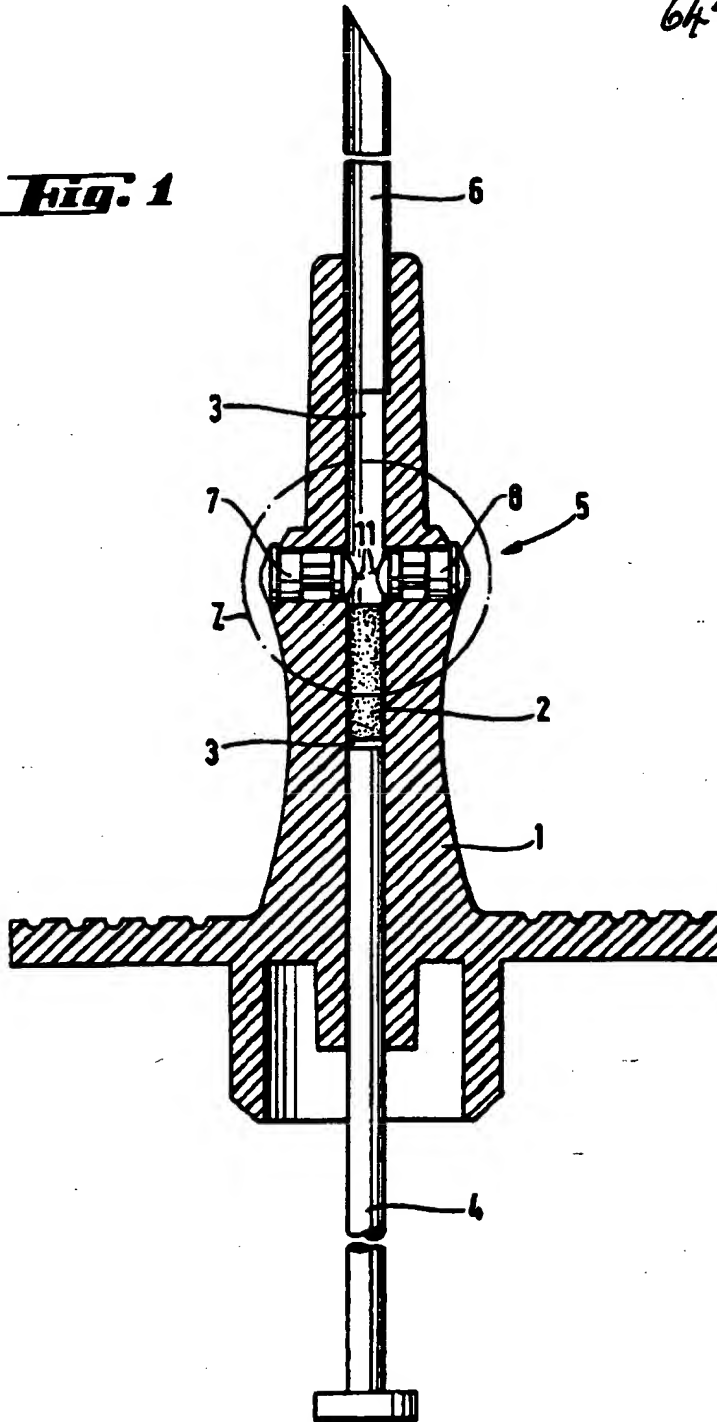
Abstract**Device for administering implants**

5 In the device for administering implants, which comprises
an active substance container with injection cannula and
plunger, the plunger is arranged in a plunger channel.
The plunger channel merges with continuity into the lumen
of the cannula. A holder device (5) for the implant (2)
10 (3).

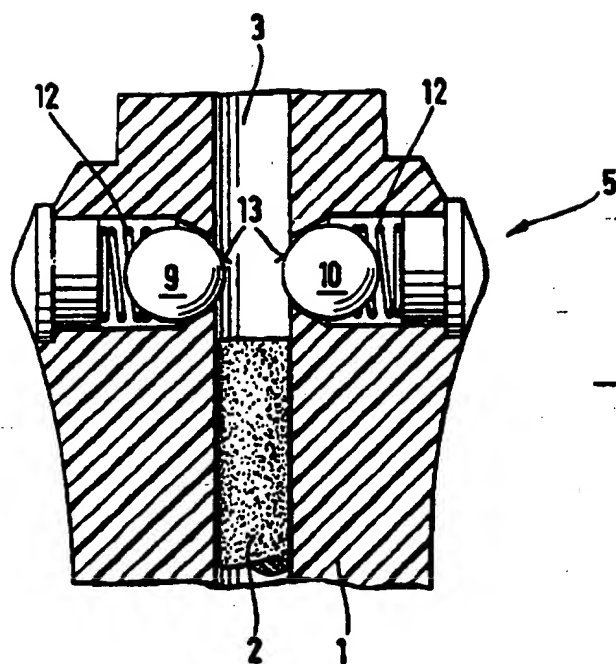
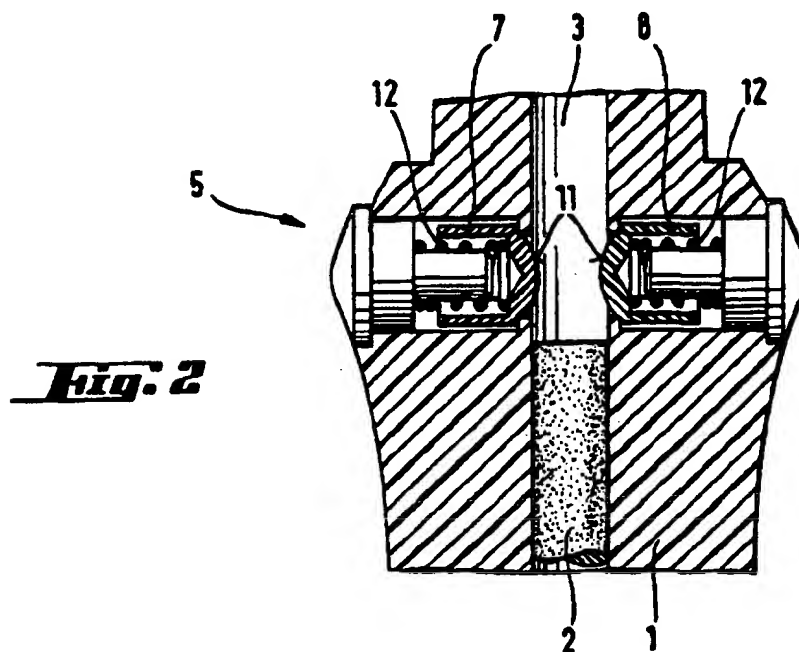
1/2

64-855/94

Fig. 1



2/2



**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked

☒ **BLACK BORDERS**

☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

☐ **FADED TEXT OR DRAWING**

☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

☐ **SKEWED/SLANTED IMAGES**

☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

☐ **GRAY SCALE DOCUMENTS**

☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**

☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.